# Forestland Interpretations

Forestland interpretations are important to good management. The management of trees begins with an understanding of the soil where they grow or are to be grown. Some soils are very suitable for growing wood crops; others barely support tree cover. Different tree species may vary in production on the same soil.

Forestland interpretations should be used to assist land users in planning, installing, and maintaining forestland management systems.

# Forest Management and Productivity

The Forestland Management and Productivity tables presents information about suitable for producing timber for each soil map unit. Management concerns, which include hazard of erosion, equipment use, seedling mortality, and windthrow hazard, are listed by ratings of SLIGHT, MODERATE, or SEVERE. Information on potential productivity includes plant competition, common trees, site index, productivity class, and trees to plant.

# Management Concerns

**EROSION HAZARD** - the risk of erosion is slight if the expected soil loss is small; moderate if some measures are needed to control erosion during logging; and severe if intensive management or special equipment and methods are needed to prevent excessive loss of soil.

**EQUIPMENT LIMITATION -** A rating of slight indicates that use of equipment is not limited to a particular kind of equipment or time of year; moderate indicates a short seasonal limitation, or a need for some modification in management of equipment; and severe indicates a seasonal limitation, a need for special equipment or management, or a hazard in the use of equipment.

**SEEDLING MORTALITY -** The ratings are for seedlings from a good planting stock that are properly planted during a period of sufficient rainfall. A rating of slight indicates that the expected mortality of the planted seedlings is less than 25 percent; moderate - 25 to 50 percent; and severe - more than 50 percent.

**WINDTHROW HAZARD -** A rating of slight indicates that trees in wooded areas are not expected to be blown down by commonly occurring winds; moderate - that some trees are blown down during periods of excessive soil wetness and strong winds; and severe that many trees are blown down during periods of excessive soil wetness and moderate or strong winds.

**PLANT COMPETITION** - A rating of slight indicates little or no competition from other plants; moderate indicates that plant competition is expected to hinder the development of the fully stocked stand of desirable trees; and severe means that plant

competition is expected to prevent the establishment of a desirable stand unless the site is intensively prepared, weeded, or otherwise managed for the control of undesirable plants.

**POTENTIAL PRODUCTIVITY** - This is discussed under the ordination class symbol.

**COMMON TREES** - Trees that generally occur on the soil are listed regardless of economic importance.

**SITE INDEX AND PRODUCTIVITY CLASS** - These are discussed under ordination class symbol.

**TREES TO PLANT** - Trees that are suitable for commercial wood production and that are adapted to the soil.

See the National Forestry Manual, Subpart B for criteria used in rating management concerns.

This subsection includes:

• (a) Forest Management (one or two tables)

#### Forest Management

Map symbol and soil name	Hand planting		Mechanical plant:	ing	Use of harvesting equ	ipment	Mechanical site preparation   (surface)		n Roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value
AkB: Askew	    Not limited 		  Not limited 		  Slightly limited  ~seasonal wetness   (slightly limited)	0.15	  Slightly limited  ~seasonal wetness   (slightly limited)	0.15	  Slightly limited  ~seasonal wetness   (slightly limited)	0.15
AsB: Askew	  Not limited 		  Not limited   		   Moderately limited   ~low strength   (moderately limited)   ~seasonal wetness   (slightly limited)	    0.50    0.15	  Slightly limited  ~seasonal wetness   (slightly limited)	0.15	   Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50
AsB2: Askew	  Not limited 		  Not limited   		   Moderately limited   ~low strength   (moderately limited)   ~seasonal wetness   (slightly limited)	  0.50    0.15	  Slightly limited  ~seasonal wetness   (slightly limited)	0.15	  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50
BaB: Barco	    Not limited		    Not limited 		    Not limited	     	    Not limited		    Not Limited 	
BaB2: Barco	  Not limited 		  Not limited 		  Not limited	   	  Not limited 		  Not Limited 	
BcB: Barco	  Not limited 		  Not limited   		  Moderately limited  ~low strength   (moderately limited)	    0.50 	  Not limited   		  Moderately limited  ~low strength   (moderately limited)	0.50
BcB2: Barco	  Not limited		  Not limited 		  Moderately limited  ~low strength   (moderately limited)	      0.50	  Not limited 		  Moderately limited  ~low strength   (moderately limited)	0.50

#### Forest Management

Map symbol and soil name	Hand planting		Mechanical plant:	ing	Use of harvesting equ:	ipment	  Mechanical site prepa   (surface)	ration	Roads (natural surface)   	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value
BdB: Barden	  Not limited 		    Not limited   		(moderately limited)	    0.50    0.15	  Slightly limited  ~seasonal wetness   (slightly limited)	0.15	   Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50
BdB2: Barden	  Not limited 		  Not limited   		(moderately limited)	  0.50    0.15	  Slightly limited  ~seasonal wetness   (slightly limited)	0.15	  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50
BoB: Bolivar	    Not limited		    Not limited		    Not limited		    Not limited		    Not Limited	
BoB2: Bolivar	  Not limited		    Not limited		    Not limited	     	    Not limited		    Not Limited	
Br: Barden	  Not limited 		  Not limited     		  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	  0.50    0.15	  Slightly limited  ~seasonal wetness   (slightly limited) 	0.15	   Moderately limited   ~low strength   (moderately limited)   ~seasonal wetness   (slightly limited)	0.50
Hepler	Not limited		  Not limited   		Moderately limited   ~low strength   (moderately limited)   ~seasonal wetness   (slightly limited)	  0.50    0.15	Slightly limited  ~seasonal wetness   (slightly limited)	0.15	Moderately limited   ~flooding   (moderately limited)   ~low strength   (moderately limited)   ~seasonal wetness   (slightly limited)	0.50

#### Forest Management

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Map symbol and soil name	   Hand planting 		   Mechanical planti: 	ng	  Use of harvesting equ 	ipment	Mechanical site preparation   (surface)		Roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value 	Rating class and limiting features	Value 	Rating class and limiting features	Value	Rating class and limiting features	Value
Br: (cont) Radley	  Not limited     		  Not limited   	         	Moderately limited   ~low strength   (moderately limited)	0.50	  Not limited     		  Very limited  ~flooding   (very limited)  ~low strength   (moderately limited)	1.00
BsB: Bronaugh	  Not limited     		  Not limited   	       	  Moderately limited  ~low strength   (moderately limited)	      0.50 	  Not limited     		  Moderately limited  ~low strength   (moderately limited)	0.50
Ca: Carytown	  Moderately limited  ~seasonal wetness   (moderately limited) 	    0.60     	  Moderately limited  ~seasonal wetness   (moderately limited)	    0.60     	  Limited  ~seasonal wetness   (limited)  ~low strength   (moderately limited)	  0.91    0.50	  Limited  ~seasonal wetness   (limited) 	  0.91   	  Limited  ~seasonal wetness   (limited)  ~low strength   (moderately limited)	0.91
Ce: Cherokee	  Moderately limited  ~seasonal wetness   (moderately limited) 	    0.60   	  Moderately limited  ~seasonal wetness   (moderately limited) 	    0.60   	   Moderately limited   ~seasonal wetness   (moderately limited)   ~low strength   (moderately limited)	  0.60    0.50	  Moderately limited  ~seasonal wetness   (moderately limited) 	0.60	  Moderately limited  ~seasonal wetness   (moderately limited)  ~low strength   (moderately limited)	0.50
Cf: Cleora	  Not limited 		  Not limited 	     	  Not limited 	     	  Not limited 		  Very limited  ~flooding   (very limited)	1.00
CoB: Collinsville	    Not limited 		    Not limited 	     	  Not limited	     	    Not limited 		    Not Limited 	
CoD: Collinsville	  Not limited   		  Moderately limited  ~slope   (moderately limited)	    0.39 	  Not limited 	     	  Not limited   		  Moderately limited  ~slope   (moderately limited)	0.60

#### Forest Management

Map symbol and soil name	Hand planting		   Mechanical planti 	ng	  Use of harvesting equ   	ipment	  Mechanical site prepa   (surface)	aration	n Roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value
CrD: Collinsville	    Not limited   		    Slightly limited  ~slope   (slightly limited)	0.30	    Not limited   	         	    Not limited   		    Moderately limited  ~slope   (moderately limited)	0.30
CsB: Creldon	  Not limited   		  Not limited  -  -		   Moderately limited   ~low strength   (moderately limited)   ~seasonal wetness   (slightly limited)	  0.50    0.26	Slightly limited  ~seasonal wetness   (slightly limited)	0.26	Moderately limited ~low strength (moderately limited) ~seasonal wetness (slightly limited)	0.50
CsB2: Creldon	  Not limited   		  Not limited     	         	  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	  0.50    0.26	  Slightly limited  ~seasonal wetness   (slightly limited)	0.26	  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50
CtB: Creldon	  Not limited 		  Not limited   	         	  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50	  Slightly limited  ~seasonal wetness   (slightly limited)	0.26	  Moderately limited  ~low strength  (moderately limited)  ~seasonal wetness   (slightly limited)	0.50
HcB: Hector	    Not limited 		    Not limited 		    Not limited 		    Not limited 		    Not Limited 	
HcD: Hector	  Not limited   	       	  Moderately limited  ~slope   (moderately limited)	    0.39 	  Not limited   	     	  Not limited 	     	  Moderately limited  ~slope   (moderately limited)	0.60

#### Forest Management

Map symbol and soil name	Hand planting		Mechanical plant:	ing	Use of harvesting equ	ipment	  Mechanical site prepa   (surface)	ration	n Roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value
HeD: Hector	  Not limited		  Slightly limited  ~slope   (slightly limited)	0.30	    Not limited 	       	  Not limited 		  Moderately limited  ~slope   (moderately limited)	0.30
HeE: Hector	  Slightly limited  ~slope   (slightly limited)	0.10	  Limited  ~slope   (limited)	0.87	  Moderately limited  ~slope   (moderately limited)	    0.42 	  Moderately limited  ~slope   (moderately limited)	0.42	  Very limited  ~slope   (very limited)	1.00
Hm: Hepler	  Not limited   		  Not limited       		  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	    0.50    0.15 	  Slightly limited  ~seasonal wetness   (slightly limited) 	0.15	  Moderately limited  ~flooding   (moderately limited)  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50
Hp: Hepler	  Not limited   		  Not limited         		  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	  0.50    0.15 	  Slightly limited  ~seasonal wetness   (slightly limited) 	    0.15       	  Moderately limited  ~flooding   (moderately limited)  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50
Hr: Hepler	  Not limited     		  Not limited           		  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)		  Slightly limited  ~seasonal wetness   (slightly limited) 	    0.15       	  Moderately limited  ~flooding   (moderately limited)  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50

#### Forest Management

Map symbol and soil name	Hand planting		   Mechanical plant 	ing	Use of harvesting equ	ipment	Mechanical site preparation (surface)		Roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value
Hr: (cont) Radley		İ	  Not limited	İ		İ	  Not limited	İ	 	İ
Radiey	Not ilmited		NOC IIMILEA		Moderately limited  ~low strength   (moderately limited) 	  0.50   			Very limited  ~flooding   (very limited)  ~low strength   (moderately limited)	1.00
KeC:	  -  Slightly limited		    Slightly limited		    Madawahala limihad				   	
keeno	~small stones   (slightly limited) 	0.07	~slope   (slightly limited)   ~small stones   (slightly limited)		Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)		Slightly limited  ~seasonal wetness   (slightly limited) 	0.20	Moderately limited   ~low strength   (moderately limited)   ~seasonal wetness   (slightly limited)	0.50
KnC:						 				
Keeno	Slightly limited  ~small stones   (slightly limited) 	0.07	Slightly limited  ~slope   (slightly limited)  ~small stones   (slightly limited)	j	Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50	Slightly limited  ~seasonal wetness   (slightly limited) 	0.20	Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50
La: Lanton	Not limited		    Not limited		    Moderately limited		    Slightly limited		    Very limited	
Папсоп	   		 		~low strength   (moderately limited)		reasonal wetness   (slightly limited)	0.29	~flooding   (very limited)	1.00
					~seasonal wetness   (slightly limited) 	0.29     			~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50     0.29
Ld: Lanton	  -  Not limited		    Not limited		    Moderately limited	   	    Slightly limited		    Very limited	
		Ì		İ	~low strength   (moderately limited)	0.50	~seasonal wetness (slightly limited)	0.29	~flooding   (very limited)	1.00
					~seasonal wetness   (slightly limited)	0.29			~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50

#### Forest Management

Map symbol and soil name	Hand planting		Mechanical planti	lng	Use of harvesting equ	ipment	Mechanical site prepa   (surface)	aration	Roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ld: (cont) Verdigris	    Not limited   		  Not limited   		  Moderately limited  ~low strength   (moderately limited)	    0.50   	  Not limited   		  Very limited  ~flooding   (very limited)  ~low strength   (moderately limited)	1.00
LeB: Lebanon	  Not limited   		  Not limited     		  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50	  Slightly limited  ~seasonal wetness   (slightly limited)	0.23	  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50
LiB: Liberal	  Not limited   		  Not limited   		  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	  0.50    0.10	  Slightly limited  ~seasonal wetness   (slightly limited)	0.10	  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50
LmC2: Liberal	  Not limited     		  Slightly limited  ~slope   (slightly limited)		  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	  0.50    0.10	Slightly limited  ~seasonal wetness   (slightly limited)	0.10	Moderately limited ~low strength (moderately limited) ~seasonal wetness (slightly limited)	0.50
LoD: Liberal	  Not limited         		  Slightly limited  ~slope   (slightly limited) 	0.30	  Moderately limited  ~low strength   (moderately limited)  ~seasonal wetness   (slightly limited)	  0.50    0.10 	  Slightly limited  ~seasonal wetness   (slightly limited)	0.10	  Moderately limited  ~low strength   (moderately limited)  ~slope   (moderately limited)  ~seasonal wetness   (slightly limited)	0.30

#### Forest Management

Map symbol and soil name	Hand planting		Mechanical planti: 	ng	Use of harvesting equ	ipment	  Mechanical site prepa   (surface)	ration	n Roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LoD: (cont) Barco	  Not limited	i I	  Slightly limited	j I	  Not limited	i I	  Not limited	 	  Moderately limited	j I
		   	~slope   (slightly limited) 	0.30		   			<pre> ~slope   (moderately limited)  </pre>	0.30
Collinsville	Not limited 	     	Slightly limited  ~slope   (slightly limited)	  0.30 	Not limited 	     	Not limited 		Moderately limited  ~slope   (moderately limited)	0.30
Mp: Kanima	Limited   ~large stones   (limited)   ~slope   (slightly limited)   ~small stones   (slightly limited)	0.62	  Very limited  ~slope   (very limited)  ~large stones >35%   (very limited)  ~small stones   (slightly limited)	  1.00    1.00    0.09	  Limited  ~slope   (limited)  ~low strength   (moderately limited)	0.50	  Limited  ~slope   (limited)  ~large stones   (limited)		  Very limited  ~slope   (very limited)  ~low strength   (moderately limited)	1.00
NeB: Newtonia	  Not limited	       	  Not limited 	       	  Moderately limited  ~low strength   (moderately limited)	      0.50	  Not limited 		  Moderately limited  ~low strength   (moderately limited)	0.50
NhC: Nixa	  Slightly limited  ~small stones   (slightly limited)	    0.08   	  Slightly limited  ~slope   (slightly limited)  ~small stones   (slightly limited)	    0.10    0.08	  Moderately limited  ~low strength   (moderately limited)	    0.50   	  Not limited   		  Moderately limited  ~low strength   (moderately limited)	0.50
PaA: Parsons	  Moderately limited  ~seasonal wetness   (moderately limited) 	    0.60   	  Moderately limited  ~seasonal wetness   (moderately limited) 		  Moderately limited  ~seasonal wetness   (moderately limited)  ~low strength   (moderately limited)		  Moderately limited  ~seasonal wetness   (moderately limited) 		  Moderately limited  ~seasonal wetness   (moderately limited)  ~low strength   (moderately limited)	0.50

#### Forest Management

Map symbol and soil name	Hand planting		Mechanical plantin	ng	Use of harvesting equ	ipment	t Mechanical site preparation   (surface)		Roads (natural surface) 	
	Rating class and limiting features	Value	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value   	Rating class and limiting features	Value
PaB: Parsons	  Moderately limited  ~seasonal wetness   (moderately limited)	0.60	  Moderately limited  ~seasonal wetness   (moderately limited)	      0.60   	  Moderately limited  ~seasonal wetness   (moderately limited)  ~low strength   (moderately limited)	0.60	  Moderately limited  ~seasonal wetness   (moderately limited)	1	  Moderately limited  ~seasonal wetness  (moderately limited)  ~low strength  (moderately limited)	0.50
PaB2: Parsons	   Moderately limited   ~seasonal wetness   (moderately limited) 	    0.60   	  Moderately limited  ~seasonal wetness   (moderately limited) 	    0.60   	  Moderately limited  ~seasonal wetness   (moderately limited)  ~low strength   (moderately limited)	  0.60    0.50	  Moderately limited  ~seasonal wetness   (moderately limited)	    0.60   	  Moderately limited  ~seasonal wetness   (moderately limited)  ~low strength   (moderately limited)	0.50
Rv: Verdigris	  Not limited   	         	  Not limited   	         	  Moderately limited  ~low strength   (moderately limited)	    0.50   	  Not limited   	         	  Very limited  ~flooding   (very limited)  ~low strength   (moderately limited)	1.00
Radley	  Not limited   	         	  Not limited       	         	  Moderately limited  ~low strength   (moderately limited)   	  0.50     	  Not limited     	         	  Very limited  ~flooding   (very limited)  ~low strength   (moderately limited) 	1.00
SuA: Summit	  Moderately limited  ~stickiness (surface)   (moderately limited) 		  Moderately limited  ~stickiness (surface)   (moderately limited)   	1	  Moderately limited  ~low strength   (moderately limited)  ~stickiness (surface)   (moderately limited)  ~seasonal wetness   (slightly limited)	İ	   Moderately limited  ~stickiness (surface)   (moderately limited)  ~seasonal wetness   (slightly limited)	İ	   Moderately limited   ~low strength   (moderately limited)   ~stickiness (surface)   (moderately limited)   ~seasonal wetness   (slightly limited)	0.50

#### Forest Management

Map symbol and soil name	Hand planting		Mechanical planting		  Use of harvesting equipment 		  Mechanical site preparation   (surface)		   Roads (natural surface) 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value
SuB: Summit	  Moderately limited  ~stickiness (surface)   (moderately limited) 		  Moderately limited  ~stickiness (surface)   (moderately limited)   		   Moderately limited  ~low strength   (moderately limited)  ~stickiness (surface)   (moderately limited)  ~seasonal wetness   (slightly limited)	0.50	   Moderately limited  ~stickiness (surface)   (moderately limited)  ~seasonal wetness   (slightly limited)		Moderately limited ~low strength (moderately limited) ~stickiness (surface) (moderately limited) ~seasonal wetness (slightly limited)	0.50
W: Water	  Not rated     	       	  Not rated     	         	  Not rated     	       	  Not rated     		Not rated	       